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=> d que l17
L1                STR
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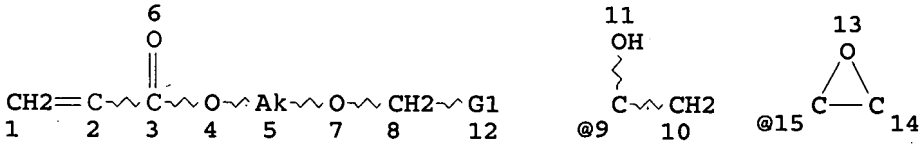


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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  15

STEREO ATTRIBUTES: NONE
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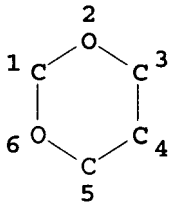


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GRAPH ATTRIBUTES:
RSPEC I
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STEREO ATTRIBUTES: NONE
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=> d que l19
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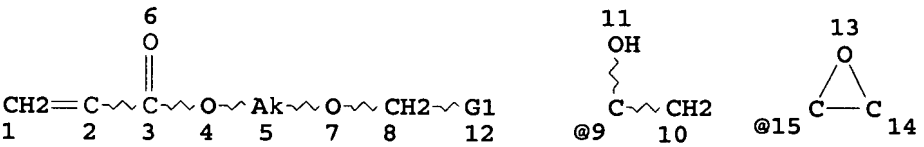


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VAR G1=9/15
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CONNECT IS E2  RC AT   5
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
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NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE
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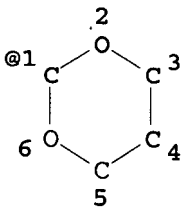
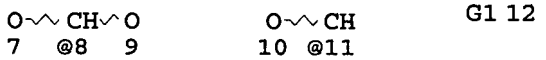
L6 STR





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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
L8 320 SEA FILE=REGISTRY SUB=L2 SSS FUL L6
L9 268 SEA FILE=REGISTRY ABB=ON PLU=ON L8 NOT 1-100/N
L10 220 SEA FILE=REGISTRY ABB=ON PLU=ON L9 NOT 1-100/SI
L11 217 SEA FILE=REGISTRY ABB=ON PLU=ON L10 NOT 1-100/P
L13 175 SEA FILE=REGISTRY ABB=ON PLU=ON L11 NOT 1-100/X
L18 137 SEA FILE=HCAPLUS ABB=ON PLU=ON L13
L19 24 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (PHOTORESIS? OR PHOTOSENSIT?)

=> d l19 1-24 ibib ed abs hitstr hitind

L19 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:213446 HCAPLUS
DOCUMENT NUMBER: 144:275414
TITLE: Active ray-curable hyperbranched polymers with good curability
INVENTOR(S): Hamasaki, Ryo; Kizumoto, Hirotoshi; Yatsuka, Takeshi
PATENT ASSIGNEE(S): Toyo Boseki Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006025236	A1	20060309	WO 2005-JP15337	20050824

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA,

UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.: JP 2004-257161 A 20040903

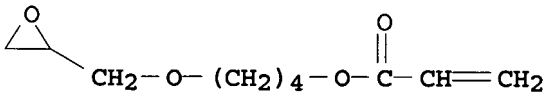
ED Entered STN: 09 Mar 2006

AB Title polymers suitable for resists can be sufficiently cured in the exposed portion even when it is irradiated with an active ray of low energy, thereby enabling to obtain a desired developed pattern at high rate. Specifically disclosed is a resin having an unsatd. bond group wherein a **photosensitizing** group is introduced into a hyperbranched structure. The hyperbranched structure is composed of a polycondensation product of an ABx-type mol., wherein A, B = organic groups having different functional groups which are chemical reactive with each other through condensation reaction or addition reaction and X = ≥2 integer. Thus, 136 parts pentaerythritol and 1776 parts dimethylolbutanoic acid were reacted at 100° in the presence of 21 parts p-toluenesulfonic acid, 100 parts toluene was added therein and heated at 140° for 5 h to give a hyperbranched polymer with acid value 14 equiv/ton and Mn 1500, 1000 parts of which was dissolved in 1000 parts propylene glycol monomethyl ether acetate, 794 parts maleic anhydride and 5.5 parts triethylamine were added therein and reacted at 80° for 3 h, 1350 parts 4-hydroxybutyl acrylate glycidyl ether and 27 parts triphenylphosphine were added therein and reacted at 115° for 4 h, 120 parts benzophenonetetracarboxylic dianhydride was added therein and reacted at 115° for 4 h to give an active ray-curable hyperbranched polymer with Mn 4700, acid value 34 mg-KOH/g, glass transition temperature 5°, and unsatd. bond concentration 4500 equiv/ton, 80 parts of which was mixed with trimethylolpropane triacrylate 20, Irgacure 651 4, and Michler's ketone 1 parts, showing good curability.

IT **119692-59-0DP**, 4-Hydroxybutyl acrylate glycidyl ether, reaction products with hydroxy-containing hyperbranched polymers and dianhydrides, polymers with acrylic monomers
(hyperbranched; active ray-curable hyperbranched polymers with good curability)

RN 119692-59-0 HCAPLUS

CN 2-Propenoic acid, 4-(2-oxiranylmethoxy)butyl ester (CA INDEX NAME)



CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 74

IT 85-43-8DP, Tetrahydrophthalic anhydride, reaction products with hydroxy-containing hyperbranched polymers, glycidyl methacrylate, and Ph glycidyl ether, polymers with acrylic monomers 106-91-2DP, Glycidyl methacrylate, reaction products with hydroxy-containing hyperbranched polymers and Ph glycidyl ether, polymers with acrylic monomers 106-91-2DP, Glycidyl methacrylate, reaction products with hydroxy-containing hyperbranched polymers, glycidyl compds., and octenyl succinic anhydride, polymers with acrylic monomers 108-31-6DP, Maleic anhydride, reaction products with hydroxy-containing hyperbranched polymers, glycidoxybutyl acrylate and dianhydrides, polymers with

acrylic monomers 122-60-1DP, Phenyl glycidyl ether, reaction products with hydroxy-containing hyperbranched polymers and glycidyl methacrylate, polymers with acrylic monomers 716-39-2DP, Naphthalene-2,3-dicarboxylic anhydride, reaction products with hydroxy-containing hyperbranched polymers, glycidoxybutyl acrylate, and Ph glycidyl ether, polymers with acrylic monomers 930-37-0DP, Methyl glycidyl ether, reaction products with hydroxy-containing hyperbranched polymers, Ph glycidyl ether, and maleic anhydride, polymers with acrylic monomers 2420-87-3DP, [5,5'-Biisobenzofuran]-1,1',3,3'-tetrone, reaction products with hydroxy and unsatd. bond-containing hyperbranched polymers, polymers with acrylic monomers 2421-28-5DP, Benzophenonetetracarboxylic dianhydride, reaction products with hydroxy and unsatd. bond-containing hyperbranched polymers, polymers with acrylic monomers 15448-58-5DP, reaction products with hydroxy-containing hyperbranched polymers and glycidoxybutyl acrylate, polymers with acrylic monomers 15625-89-5DP, Trimethylolpropane triacrylate, polymers with unsatd. bond-containing hyperbranched polymers 25134-21-8DP, Methylnadic anhydride, reaction products with hydroxy-containing hyperbranched polymers and maleic anhydride, polymers with acrylic monomers 25377-73-5DP, Dodecenyl succinic anhydride, reaction products with hydroxy-containing hyperbranched polymers, glycidoxybutyl acrylate and dianhydrides, polymers with acrylic monomers 26590-20-5DP, Methyltetrahydrophthalic anhydride, reaction products with hydroxy-containing hyperbranched polymers, glycidyl compds., glycidoxy acrylate, and maleic anhydride, polymers with acrylic monomers 26680-54-6DP, Octenyl succinic anhydride, reaction products with hydroxy-containing hyperbranched polymers, anhydrides, glycidyl ether compds., and maleic anhydride, polymers with acrylic monomers 47758-37-2DP, reaction products with hydroxy-containing hyperbranched polymers, glycidoxy acrylate, and maleic anhydride, polymers with acrylic monomers **119692-59-0DP**, 4-Hydroxybutyl acrylate glycidyl ether, reaction products with hydroxy-containing hyperbranched polymers and dianhydrides, polymers with acrylic monomers 121174-67-2DP, 9-Glycidyl Anthracene, reaction products with hydroxy-containing hyperbranched polymers and glycidoxy acrylate, polymers with acrylic monomers 873427-51-1DP, Dimethylolbutanoic acid-pentaerythritol copolymer, reaction products with anhydrides, glycidoxybutyl acrylate and dianhydrides, polymers with acrylic monomers 878140-19-3DP, reaction products with anhydrides, glycidyl methacrylate and Ph glycidyl ether, polymers with acrylic monomers 878140-20-6DP, reaction products with anhydrides, glycidyl ether compds., and maleic anhydride, polymers with acrylic monomers 878140-21-7DP, reaction products with anhydrides, glycidyl compds., and maleic anhydride, polymers with acrylic monomers 878140-22-8DP, reaction products with hydroxy-containing hyperbranched polymers, maleic anhydride, and glycidyl compds., polymers with acrylic monomers 878140-23-9DP, reaction products with anhydrides, glycidyl compds., glycidyl methacrylate, and octenyl succinic anhydride, polymers with acrylic monomers

(hyperbranched; active ray-curable hyperbranched polymers with good curability)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:51180 HCAPLUS
DOCUMENT NUMBER: 144:138939
TITLE: Hyperbranched resins and negative UV **photoresists** therewith having extreme high

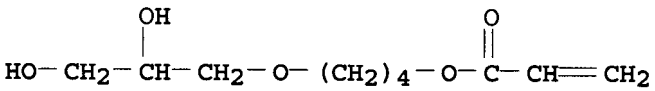
sensitivity at low dose
INVENTOR(S): Kitsumoto, Hirotoshi; Yatsuka, Takeshi; Hamazaki, Akira
PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006016534	A	20060119	JP 2004-196868	20040702
PRIORITY APPLN. INFO.:			JP 2004-196868	20040702

ED Entered STN: 19 Jan 2006
AB The resins have unsatd. bond-holding hyperbranched structures, preferably prepared from mols. KR'(RmL)n [R = C<20 bivalent organic group; R' = C<20 (n + 1)-valent organic group or R''N (R'' = C<20 bivalent organic group); K, L = ester-forming functional groups (K ≠ L); m = 0, 1; n ≥2] and satisfying unsatd. bond concentration ≥500 equiv/ton. **Photoresists** containing the resins and initiators are further claimed.
IT **873427-53-3P**
(hyperbranched; hyperbranched resins and neg. UV **photoresists** therewith having extreme high sensitivity)
RN 873427-53-3 HCAPLUS
CN Butanoic acid, bis(hydroxymethyl)-, homopolymer, ester with 2,2-bis(hydroxymethyl)-1,3-propanediol, hydrogen (2Z)-2-butenedioate, 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 251298-12-1
CMF C10 H18 O5



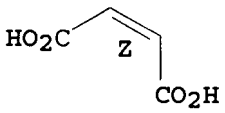
CM 2

CRN 873427-52-2
CMF (C6 H12 O4)x . x C5 H12 O4 . x C4 H4 O4

CM 3

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.

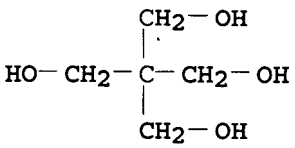


CM 4

CRN 873427-51-1
CMF (C6 H12 O4)x . x C5 H12 O4

CM 5

CRN 115-77-5
CMF C5 H12 O4

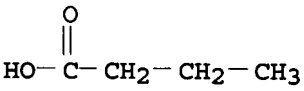


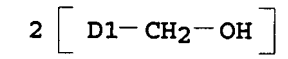
CM 6

CRN 866007-73-0
CMF (C6 H12 O4)x
CCI PMS

CM 7

CRN 56743-27-2
CMF C6 H12 O4
CCI IDS





CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST hyperbranched polyester neg UV **photoresist** sensitivity; dimethylolbutanoic acid hyperbranched polyester **photoresist**
IT Negative **photoresists**
(UV; hyperbranched resins and neg. UV **photoresists** therewith having extreme high sensitivity)
IT Polyesters, preparation
(acrylate-terminated, hyperbranched, unsatd. group-containing;

hyperbranched resins and neg. UV **photoresists** therewith having extreme high sensitivity)

IT Polyoxyalkylenes, preparation
(epoxy-polyester-, hyperbranched; hyperbranched resins and neg. UV **photoresists** therewith having extreme high sensitivity)

IT Polyesters, preparation
(epoxy-polyoxyalkylene-, hyperbranched; hyperbranched resins and neg. UV **photoresists** therewith having extreme high sensitivity)

IT Polyesters, preparation
(hyperbranched, unsatd. group-containing; hyperbranched resins and neg. UV **photoresists** therewith having extreme high sensitivity)

IT Dendritic polymers
(hyperbranched; hyperbranched resins and neg. UV **photoresists** therewith having extreme high sensitivity)

IT Epoxy resins, preparation
(polyester-polyoxyalkylene-, hyperbranched; hyperbranched resins and neg. UV **photoresists** therewith having extreme high sensitivity)

IT 15625-89-5, Trimethylolpropane triacrylate
(hyperbranched resins and neg. UV **photoresists** therewith having extreme high sensitivity)

IT 873427-52-2P **873427-53-3P** 873428-02-5P 873428-04-7P 873428-06-9P
(hyperbranched; hyperbranched resins and neg. UV **photoresists** therewith having extreme high sensitivity)

IT 24650-42-8, Irgacure 651
(initiators; hyperbranched resins and neg. UV **photoresists** therewith having extreme high sensitivity)

L19 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:697110 HCAPLUS
DOCUMENT NUMBER: 143:163099
TITLE: **Photosensitive** resin composition with excellent **photosensitivity** and cured product thereof
INVENTOR(S): Koyanagi, Hiroo; Tanaka, Ryutaro; Kametani, Hideaki
PATENT ASSIGNEE(S): Nippon Kayaku Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005071489	A1	20050804	WO 2005-JP761	20050121

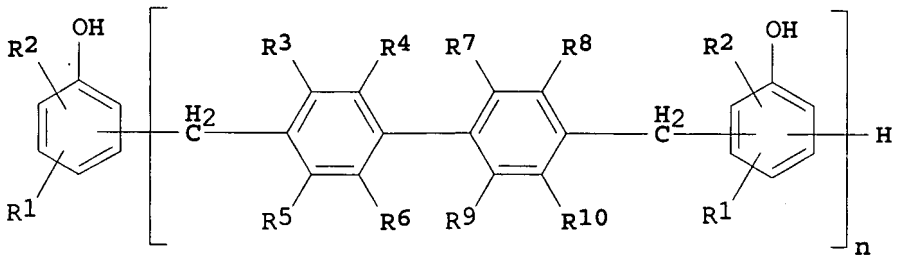
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC,

NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2552905	A1	20050804	CA 2005-2552905		20050121
EP 1710626	A1	20061011	EP 2005-703982		20050121
R: CH, DE, ES, GB, IT, LI					
CN 1910519	A	20070207	CN 2005-80003090		20050121
PRIORITY APPLN. INFO.:			JP 2004-16751	A	20040126
			WO 2005-JP761	W	20050121

ED Entered STN: 05 Aug 2005

GI



I

AB Disclosed is a **photosensitive** resin composition with excellent **photosensitivity** whose cured product is excellent in adhesiveness, pencil hardness, solvent resistance, acid resistance, heat resistance, gold plating resistance, HAST (highly accelerated temperature and humidity stress test) properties, flame retardance, flexibility and the like. Also disclosed is such a cured product. A **photosensitive** resin composition is characterized by comprising a reaction product (A) of a compound (a) represented by the formula I (n = 1-20; R1, R2 = H, halo, C1-4-alkyl; R3, R5, R8, R10 = H, halo, methyl; R4, R6, R7, R9 = H, methyl), a compound (b) having an ethylenically unsatd. group and a glycidyl group in a mol. and a polybasic acid anhydride (c), a crosslinking agent (B) and a photopolymn. initiator (C). Also disclosed is a cured product of such a **photosensitive** resin composition

IT **860022-07-7P 860022-08-8P 860022-09-9P**
(**photosensitive** resin composition with excellent **photosensitivity** suitable for printed circuit board fabrication)

RN 860022-07-7 HCAPLUS

CN 2-Propenoic acid, 4-(oxiranylmethoxy)butyl ester, polymer with MEH 7851SS (9CI) (CA INDEX NAME)

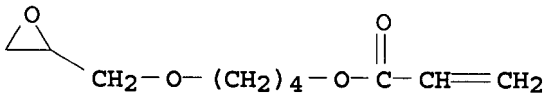
CM 1

CRN 363137-30-8
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 119692-59-0
CMF C10 H16 O4



RN 860022-08-8 HCAPLUS
CN 2-Propenoic acid, 4-(oxiranylmethoxy)butyl ester, polymer with MEH 7851-3H and 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI) (CA INDEX NAME)

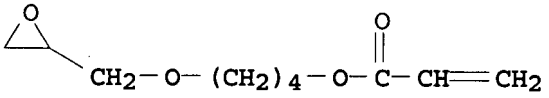
CM 1

CRN 477290-92-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

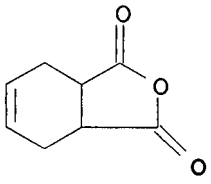
CM 2

CRN 119692-59-0
CMF C10 H16 O4



CM 3

CRN 85-43-8
CMF C8 H8 O3



RN 860022-09-9 HCAPLUS
CN 2-Propenoic acid, 4-(oxiranylmethoxy)butyl ester, polymer with dihydro-2,5-furandione and MEH 7851-3H (9CI) (CA INDEX NAME)

CM 1

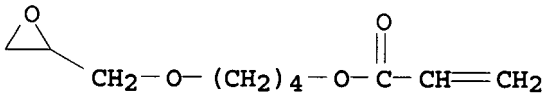
CRN 477290-92-9
CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

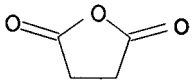
CM 2

CRN 119692-59-0
CMF C10 H16 O4



CM 3

CRN 108-30-5
CMF C4 H4 O3



IC ICM G03F007-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76
ST **photosensitive** resin compn solder resist printed circuit board fabrication
IT Solder resists
(**photoresists**; **photosensitive** resin composition with excellent **photosensitivity** and cured product thereof)
IT Printed circuit boards
(**photosensitive** resin composition with excellent **photosensitivity** and cured product thereof)
IT **Photoresists**
(solder; **photosensitive** resin composition with excellent **photosensitivity** and cured product thereof)
IT 93294-97-4, DPCA 60
(crosslinking agent in **photosensitive** resin composition with excellent **photosensitivity** suitable for printed circuit board fabrication)
IT 71868-10-5, Irgacure 907 82799-44-8, DETX S
(photopolymn. initiator in **photosensitive** resin composition with excellent **photosensitivity** suitable for printed circuit board fabrication)
IT **860022-07-7P 860022-08-8P 860022-09-9P**
(**photosensitive** resin composition with excellent **photosensitivity** suitable for printed circuit board fabrication)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:141394 HCAPLUS

DOCUMENT NUMBER: 142:249442
TITLE: Alkali-developable radiation curable composition
INVENTOR(S): Chew, Kong Chin
PATENT ASSIGNEE(S): Surface Specialties, S. A., Belg.
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

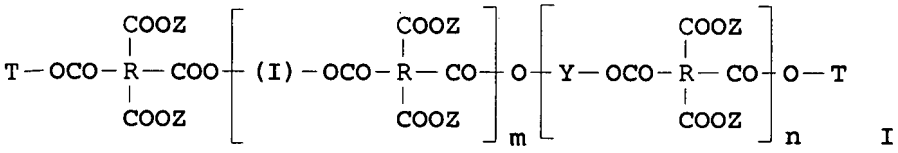
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005015309	A2	20050217	WO 2004-EP7731	20040713
WO 2005015309	A3	20050421		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

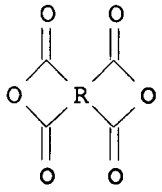
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: MY 2003-2693 A 20030717

ED Entered STN: 18 Feb 2005
GI



I



II

AB The invention provides a radiation curable polymer described as dianhydride- polyol extended epoxy acrylate bearing carboxylic groups, as represented by Formula I (the radiation curable polymer is derived by reacting compound(1), compound (2) and compound (3), optionally further reacting with compound (4) and compound (5); compound (1) has at least 2 secondary hydroxyl groups and at least 2 (meth)acrylate groups; compound (2) is a dianhydride compound of formula II; compound (3) is selected from polyols with at least 2 primary hydroxyl groups; compound (4) is a

monofunctional alc. selected from alkyl alcs. of C2-20, methoxy alkyl alcs. of C2-20, (meth)acrylate compound containing a primary or secondary hydroxyl group; compound (5) is a epoxy containing unsatd. compound); which is useful in alkali-developable **photosensitive** formulations for the fabrication of printed circuit boards or flat panel displays.

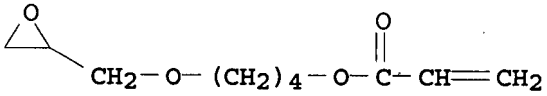
IT **844658-24-8P**
(alkali-developable radiation curable composition)

RN 844658-24-8 HCAPLUS

CN Hexanedioic acid, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, 2,2-dimethyl-1,3-propanediol, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate and 4-(oxiranylmethoxy)butyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

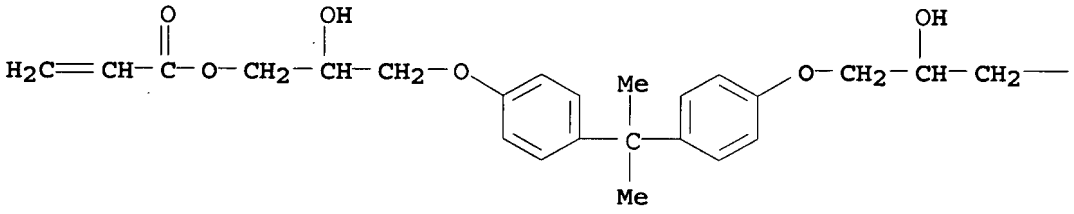
CRN 119692-59-0
CMF C10 H16 O4



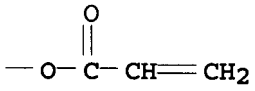
CM 2

CRN 4687-94-9
CMF C27 H32 O8

PAGE 1-A

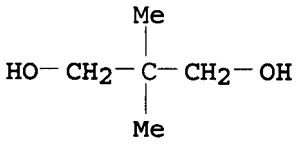


PAGE 1-B



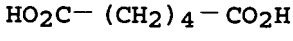
CM 3

CRN 126-30-7
CMF C5 H12 O2



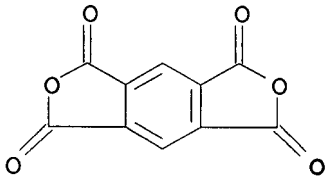
CM 4

CRN 124-04-9
CMF C6 H10 O4



CM 5

CRN 89-32-7
CMF C10 H2 O6



IC ICM G03F001-00
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
IT 844658-23-7P **844658-24-8P** 844658-25-9P
(alkali-developable radiation curable composition)

L19 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:931627 HCAPLUS
DOCUMENT NUMBER: 141:403471
TITLE: Radiation-curable alkali-soluble resin, composition of the resin, composition for solder resist, dry film, and printed circuit board
INVENTOR(S): Ono, Takao; Kawai, Manabu; Imai, Shinji
PATENT ASSIGNEE(S): Tamura Kaken Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004307710	A	20041104	JP 2003-105359	20030409
PRIORITY APPLN. INFO.:			JP 2003-105359	20030409

ED Entered STN: 06 Nov 2004
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The resin is that obtained by reaction of an epoxy resin I (R = organic compound residue after removal of active H; ns are 0-100; sum of ns is 1-100; x = 1-100; part of Y = epoxy group II) and an unsatd. monocarboxylic acid, reaction of the product and a polybasic acid anhydride, and reaction of the product and an ethylenic unsatd. compound having 1 epoxy group, which is contained in the claimed composition The solder resist contains the composition and the solder resist film is involved in the printed circuit board. The **photosensitive** dry film is prepared from the composition Alternatively, the printed circuit board involves a solder resist film made of the cured **photosensitive** dry film. The composition shows enhanced **photosensitivity** and resistance to plating of gold.

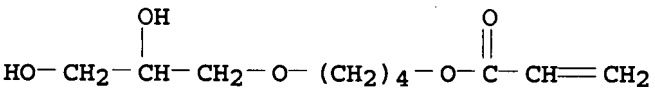
IT **786652-75-3P**
(radiation-curable alkali-soluble epoxy resin for solder resist, dry resist film, and printed circuit board)

RN 786652-75-3 HCAPLUS

CN Poly[oxy(oxiranyl-1,2-cyclohexanediyl)], α-hydro-ω-hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), hydrogen 4-cyclohexene-1,2-dicarboxylate 2-propenoate, 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 251298-12-1
CMF C10 H18 O5



CM 2

CRN 129495-67-6
CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3 . x C8 H10 O4 . x C3 H4 O2

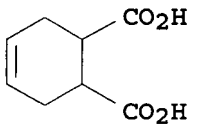
CM 3

CRN 244772-00-7
CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3
CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

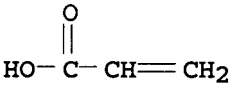
CM 4

CRN 88-98-2
CMF C8 H10 O4



CM 5

CRN 79-10-7
CMF C3 H4 O2

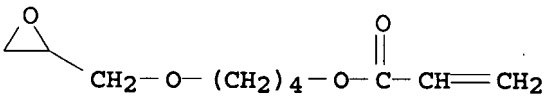


IC ICM C08G059-14
ICS G03F007-004; G03F007-027; H05K003-28
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 76
ST radiation curable alkali sol resin resist; dry film **photosensitive** unsatd epoxy resin; printed circuit board solder resist
IT Acid-resistant materials
Electric insulators
Heat-resistant materials
Photoresists
Printed circuit boards
Solder resists
Solvent-resistant materials
(radiation-curable alkali-soluble epoxy resin for solder resist, dry resist film, and printed circuit board)
IT 786652-71-9P, EHPE 3150 acrylate tetrahydrophthalate ester with glycidyl methacrylate 786652-73-1P **786652-75-3P**
(radiation-curable alkali-soluble epoxy resin for solder resist, dry resist film, and printed circuit board)

L19 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:779273 HCAPLUS
DOCUMENT NUMBER: 141:285815
TITLE: Light-sensitive resin composition for solder resist for manufacturing printed circuit boards
INVENTOR(S): Mizushima, Masahiro
PATENT ASSIGNEE(S): Gooh Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004264773	A	20040924	JP 2003-57401	20030304
PRIORITY APPLN. INFO.:			JP 2003-57401	20030304

ED Entered STN: 24 Sep 2004
AB The title composition consists of: a light-sensitive resin; a photopolymn. initiator; a heat-sensitive hardener; and a solvent, wherein the light-sensitive resins is prepared from a glycidyl compound and a light-sensitive resin having carboxyl groups. The composition provides short curing time of the pattern and solder resist pattern in short time.
IT **119692-59-0DP**, 4-Hydroxybutyl acrylate glycidyl ether, reaction product with acrylic polymer
(light-sensitive resin composition for solder resist for manufacturing printed
circuit boards)
RN 119692-59-0 HCAPLUS
CN 2-Propenoic acid, 4-(2-oxiranylmethoxy)butyl ester (CA INDEX NAME)



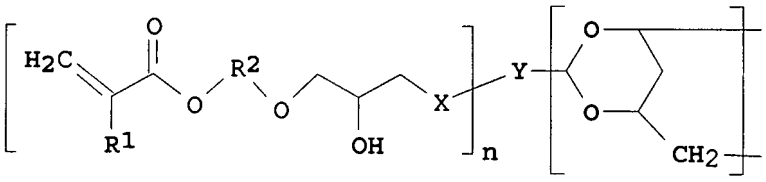
IC ICM G03F007-038
ICS C08G059-14; G03F007-004; G03F007-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76
IT **Photoresists**
Printed circuit boards
Solder resists
(light-sensitive resin composition for solder resist for manufacturing printed
circuit boards)
IT 87912-85-4DP, Epiclon N 680, reaction product with 4-Hydroxybutyl acrylate glycidyl ether **119692-59-0DP**, 4-Hydroxybutyl acrylate glycidyl ether, reaction product with acrylic polymer 469860-43-3DP, reaction product with 4-Hydroxybutyl acrylate glycidyl ether 760996-26-7DP, Glycidyl methacrylate-methyl methacrylate-acrylic acid-N-cyclohexylmaleimide copolymer ester with tetrahydrophthalic acid anhydride, reaction product with 4-Hydroxybutyl acrylate glycidyl ether 760996-27-8DP, Glycidyl methacrylate-methyl methacrylate-acrylic acid-NK Ester 9G copolymer ester with tetrahydrophthalic acid anhydride, reaction product with 4-Hydroxybutyl acrylate glycidyl ether
(light-sensitive resin composition for solder resist for manufacturing printed
circuit boards)

L19 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:515559 HCAPLUS
DOCUMENT NUMBER: 141:55128
TITLE: Novel **photosensitive** resin based on saponified polyvinyl acetate, **photosensitive** resin composition, method of forming aqueous gel from the same, and compound
INVENTOR(S): Yamada, Seigo; Takano, Masahiro; Miyazaki, Mitsuharu; Utsunomiya, Shin
PATENT ASSIGNEE(S): Toyo Gosei Co., Ltd., Japan
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052947	A1	20040624	WO 2003-JP14467	20031113
W: CN, KR, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
JP 2004189841	A	20040708	JP 2002-358263	20021210
EP 1574528	A1	20050914	EP 2003-772745	20031113
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
CN 1723222	A	20060118	CN 2003-80105691	20031113
US 2006148925	A1	20060706	US 2005-538690	20050610
PRIORITY APPLN. INFO.:			JP 2002-358263 A	20021210
			WO 2003-JP14467 W	20031113

OTHER SOURCE(S): MARPAT 141:55128
ED Entered STN: 27 Jun 2004
GI

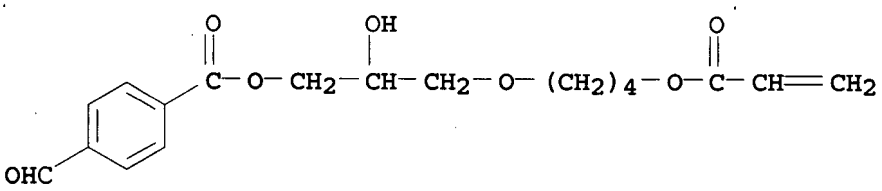


I

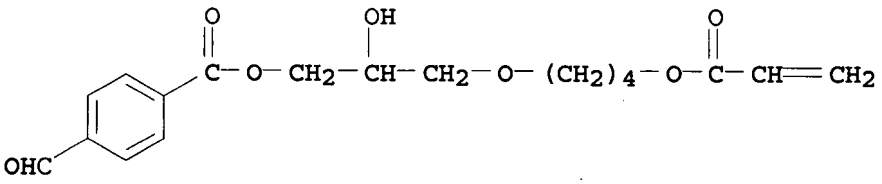
AB The present invention relates to (i) a **photosensitive** resin which is a material having excellent storage stability, having an affinity for and miscibility with various compds. and high sensitivity, and capable of solidifying even when it contains water, and which gives a cured article having high sensitivity and excellent flexibility and can be evenly solidified even when it has a high water content, (ii) a **photosensitive** resin composition, and (iii) a novel compound The **photosensitive** resin based on a saponified polyvinyl acetate has a structural unit I, wherein R1 = H or methyl; R2 = C2-10 linear or branched alkylene; n = 1-3 integer; X = O, OC(:O)CH2O, or OC(:O)(CH2)m; m - 0-6 integer; and Y = an aromatic ring or a single bond. Thus, 45 g 4-hydroxybutyl acrylate glycidyl ether and 60 g terephthal aldehydic acid were reacted in the presence of 0.2 g p-methoxyphenol as a polymerization inhibitor and 1.4 g N,N-dimethyl-4-aminopyridine as a catalyst at 85° for 9 h, 10 g 5% sodium carbonate was added therein and extracted to give a product mixture, 4.2 g of which was mixed with Gohsenol EG 30 saponified polyvinyl acetate 50, phosphoric acid 3.0, and 2-propanol 59 g, and ADK Stab LA 7RD polymerization inhibitor 13.6 mg, stirred at 60° for 7 h, 44 g Diaion WA 20 basic ionic exchange resin was added therein to neutralize them, filtered to remove ionic exchange resin, 3% Irgacure 2959 was added therein to give a **photosensitive** resin composition, showing good gel formation when used in dilution

IT **705980-72-9P**
(monomer; preparation of **photosensitive** resin based on saponified

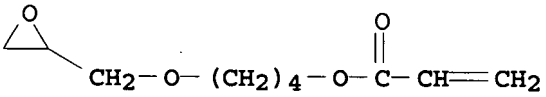
polyvinyl acetate)
RN 705980-72-9 HCAPLUS
CN Benzoic acid, 4-formyl-, 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester (9CI) (CA INDEX NAME)



IT **705980-72-9DP**, reaction products with saponified polyvinyl acetate, polymers
(preparation of **photosensitive** resin based on saponified polyvinyl acetate)
RN 705980-72-9 HCAPLUS
CN Benzoic acid, 4-formyl-, 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester (9CI) (CA INDEX NAME)



IT **119692-59-0**, 4-Hydroxybutyl acrylate glycidyl ether
(reactant in monomer preparation; preparation of **photosensitive** resin based on saponified polyvinyl acetate)
RN 119692-59-0 HCAPLUS
CN 2-Propenoic acid, 4-(2-oxiranylmethoxy)butyl ester (CA INDEX NAME)



IC ICM C08F008-28
ICS C08F299-00; C07C069-54; C07C069-734; G03F007-038
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 74
ST **photosensitive** resin sapond polyvinyl acetate compn aq gel; hydroxybutyl acrylate glycidyl ether terephthal aldehydic acid reactant; Gohsenol acryloxy contg hydroxyalkyl benzaldehyde **photosensitive** resin
IT Hydrogels
Photoimaging materials
Photoresists
(preparation of **photosensitive** resin based on saponified polyvinyl acetate)
IT **705980-72-9P** 705980-73-0P
(monomer; preparation of **photosensitive** resin based on saponified polyvinyl acetate)
IT 9002-89-5DP, Gohsenol EG 30, reaction products with acryloxy-containing

hydroxyalkyl benzaldehyde, polymers **705980-72-9DP**, reaction products with saponified polyvinyl acetate, polymers 705980-73-0DP, reaction products with saponified polyvinyl acetate, polymers 709043-20-9DP, OKS 9101, reaction products with acryloxy-containing hydroxyalkyl benzaldehyde, polymers
(preparation of **photosensitive** resin based on saponified polyvinyl acetate)

IT 619-66-9, Terephthal aldehydic acid **119692-59-0**, 4-Hydroxybutyl acrylate glycidyl ether
(reactant in monomer preparation; preparation of **photosensitive** resin based on saponified polyvinyl acetate)

L19 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:430849 HCAPLUS
DOCUMENT NUMBER: 140:424397
TITLE: **Photosensitive** resin compositions useful for hydrogel formation
INVENTOR(S): Utsunomiya, Shin; Yamada, Seigo; Takano, Masahiro; Miyazaki, Mitsuharu
PATENT ASSIGNEE(S): Toyo Gosei Co., Ltd., Japan
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

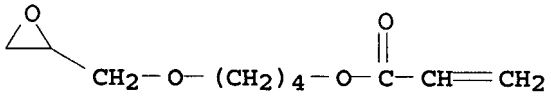
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004044024	A1	20040527	WO 2003-JP14466	20031113
W: CN, KR, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
JP 2004161942	A	20040610	JP 2002-331269	20021114
EP 1564232	A1	20050817	EP 2003-772744	20031113
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
CN 1711295	A	20051221	CN 2003-80103275	20031113
US 2006041052	A1	20060223	US 2005-535045	20050513
PRIORITY APPLN. INFO.:			JP 2002-331269 A	20021114
			WO 2003-JP14466 W	20031113

ED Entered STN: 27 May 2004
AB A **photosensitive** resin composition comprises (A) a water-soluble **photosensitive** poly(meth)acrylic acid resin which is produced by addition reaction of part of the carboxyl groups of a (meth)acrylic acid polymer with glycidoxyalkyl (meth)acrylate and has an acid number of solids of 150 mg KOH/g or above, (B) a photopolymn. initiator, and (C) water. Hydrogel made from the compns. is useful for medical use, etc. Thus, heating Aqualic AS 58 (acrylic polymer) with 4-hydroxybutyl acrylate glycidyl ether in methanol in the presence of pyridine gave a **photosensitive** polymer which could be cured by UV light in the presence of a photoinitiator to give a hydrogel.
IT **691401-65-7P**, Acrylic acid-4-hydroxybutyl acrylate glycidyl ether copolymer
(manufacture of **photosensitive** resin compns. useful for hydrogel formation)
RN 691401-65-7 HCAPLUS
CN 2-Propenoic acid, polymer with 4-(2-oxiranylmethoxy)butyl 2-propenoate

(CA INDEX NAME)

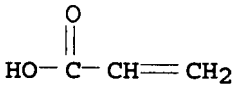
CM 1

CRN 119692-59-0
CMF C10 H16 O4



CM 2

CRN 79-10-7
CMF C3 H4 O2



IC ICM C08F299-04
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 63
IT Hydrogels
(manufacture of **photosensitive** resin compns. useful for hydrogel formation)
IT Crosslinking
(photochem.; manufacture of **photosensitive** resin compns. useful for hydrogel formation)
IT 106797-53-9, Irgacure 2959
(manufacture of **photosensitive** resin compns. useful for hydrogel formation)
IT **691401-65-7P**, Acrylic acid-4-hydroxybutyl acrylate glycidyl ether copolymer
(manufacture of **photosensitive** resin compns. useful for hydrogel formation)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

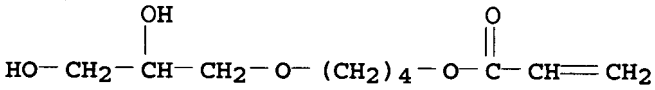
L19 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:391634 HCAPLUS
DOCUMENT NUMBER: 140:383219
TITLE: Pigmented photoimaging resin compositions with less odor, their patterning, and color filters and liquid crystal displays having patterned layers therefrom
INVENTOR(S): Takebe, Kazuo; Shirakawa, Masakazu; Fujita, Masato
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004138950	A	20040513	JP 2002-305545	20021021
PRIORITY APPLN. INFO.:			JP 2002-305545	20021021

ED Entered STN: 14 May 2004
AB The compns., showing high **photosensitivity** and remaining less scums on development, comprise binder polymers prepared from unsatd. carboxylic acid polymers and (meth)acryloyloxy-C1-6 hydrocarbyl glycidyl ethers, **photosensitive** monomers, photopolymn. initiators chosen from triazines, acetophenones, and/or biimidazoles, coloring materials, and solvents.
IT **683811-59-8P**
(binder polymers; odorless color photoimaging compns. showing less development scums for LCD color filters)
RN 683811-59-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with phenylmethyl 2-methyl-2-propenoate, 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 251298-12-1
CMF C10 H18 O5

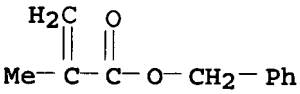


CM 2

CRN 65697-21-4
CMF (C11 H12 O2 . C4 H6 O2)x
CCI PMS

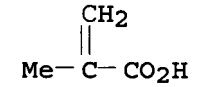
CM 3

CRN 2495-37-6
CMF C11 H12 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-038
ICS C08F002-44; C08F265-04; G02B005-20; G03F007-029; G03F007-031
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 73
IT **683811-59-8P**
(binder polymers; odorless color photoimaging compns. showing less development scums for LCD color filters)

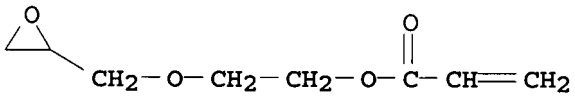
L19 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:271985 HCAPLUS
DOCUMENT NUMBER: 140:294703
TITLE: Manufacture of dry imaging material with improved dust resistant and storage stability
INVENTOR(S): Hanyu, Takeshi
PATENT ASSIGNEE(S): Konica Minolta Holdings Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004101802	A	20040402	JP 2002-262596	20020909
PRIORITY APPLN. INFO.:			JP 2002-262596	20020909

OTHER SOURCE(S): MARPAT 140:294703
ED Entered STN: 02 Apr 2004
AB Title imaging material is manufactured by treating a polyester substrate by corona discharge, plasma discharge, UV radiation, electron beam radiation, or X-ray radiation, applying an undercoat to the treated substrate, and forming a **photosensitive** layer containing **photosensitive** silver halide particles, organic silver salts, reducing agents, and binding agents. The process is characterized in that the undercaot-forming material is added oxidizing agent and is heat-treated at 60-100°; when the undercoat is dried, the coated polyester substrate is heated to 80-30° for curing.
IT **676261-69-1**
(manufacture of dry imaging material with improved dust resistant and storage stability)
RN 676261-69-1 HCAPLUS
CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene, ethyl 2-propenoate and 2-(oxiranylmethoxy)ethyl 2-propenoate (9CI) (CA INDEX NAME)

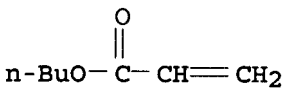
CM 1

CRN 30491-78-2
CMF C8 H12 O4



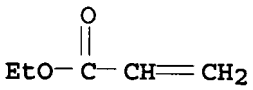
CM 2

CRN 141-32-2
CMF C7 H12 O2



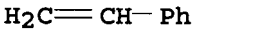
CM 3

CRN 140-88-5
CMF C5 H8 O2



CM 4

CRN 100-42-5
CMF C8 H8



IC ICM G03C001-76
ICS G03C001-498; G03C001-74
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 9011-08-9 52192-09-3 661467-61-4 661467-63-6 661467-64-7 661467-65-8 661467-67-0 661467-69-2 661467-71-6 661467-73-8 668448-44-0 **676261-69-1**
(manufacture of dry imaging material with improved dust resistant and storage stability)

L19 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:913204 HCAPLUS
DOCUMENT NUMBER: 139:388497
TITLE: Radiation curable compositions
INVENTOR(S): Chew, Kong Chin; Alias, Norazmi
PATENT ASSIGNEE(S): UCB, S.A., Belg.
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

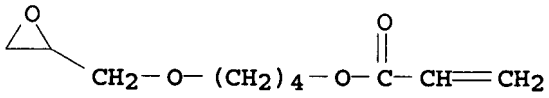
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003095506	A1	20031120	WO 2003-EP4849	20030509
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003227739	A1	20031111	AU 2003-227739	20030509
PRIORITY APPLN. INFO.:			MY 2002-1704 A	20020510
			WO 2003-EP4849 W	20030509

ED Entered STN: 21 Nov 2003

AB A water-dilutable and/or dispersible radiation curable composition is soluble in aqueous alkaline solution and comprises the reaction product of a hydroxy-functionalized amino (meth)acrylate with anhydride-containing compds. The hydroxy-functionalized amino(meth)acrylate is prepared from the Michael addition of a primary, or more preferably, a secondary amine to a multifunctional (meth)acrylate monomer. The amine compound is HNR1R2, where R1 and R2 = H or optionally substituted hydrocarbon, such as alkyl, aryl, cycloalkyl, arylalkyl, hydroxy alkyl, hydroxy aryl, hydroxy cycloalkyl and hydroxy cycloaryl, optionally containing (poly)amido, (poly)ester, (poly)urethane, (poly)urea, (poly)ether, and (poly)carbonate, but must not both be H at the same time.

IT **119692-59-0DP**, 4-Hydroxybutyl acrylate glycidyl ether, reaction products with Michael adduct, and anhydride
(oligomer; radiation-curable water-dilutable compns. containing)
RN 119692-59-0 HCAPLUS
CN 2-Propenoic acid, 4-(2-oxiranylmethoxy)butyl ester (CA INDEX NAME)



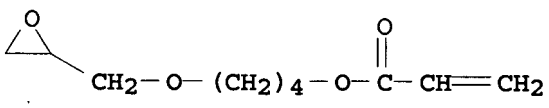
IC ICM C08F008-32
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 37
IT **Photoresists**
(radiation curable compns. for)
IT 85-43-8DP, Tetrahydrophthalic anhydride, reaction products with Michael adduct 85-44-9DP, Phthalic anhydride, reaction products with Michael adduct 109-83-1DP, Monomethylethanolamine, Michael adduct with acrylate, reaction products with anhydride 868-77-9DP, 2-Hydroxyethyl methacrylate, reaction products with pyromellitic dianhydride, Michael adduct, and SRD 1042 15625-89-5DP, Trimethylolpropane triacrylate, Michael adduct with monomethylethanolamine, reaction products with anhydride

67527-24-6DP, reaction products with Michael adduct 80413-52-1DP, Placcel FA 2D, reaction products with pyromellitic dianhydride, Michael adduct, and SRD 1042 **119692-59-0DP**, 4-Hydroxybutyl acrylate glycidyl ether, reaction products with Michael adduct, and anhydride 624740-07-4DP, SRD 1043, reaction products with pyromellitic dianhydride, Michael adduct, and hydroxyethyl methacrylate
(oligomer; radiation-curable water-dilutable compns. containing)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:653451 HCAPLUS
DOCUMENT NUMBER: 139:188421
TITLE: Photopolymerizable compositions having good developability and solubility and their color filters
INVENTOR(S): Tanigawa, Keiko
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003233179	A	20030822	JP 2002-31338	20020207
PRIORITY APPLN. INFO.:			JP 2002-31338	20020207

ED Entered STN: 22 Aug 2003
AB The compns. contain (A) photopolymn. initiators, (B) binder resins bearing structures prepared by addition of carboxylic acid sites of carboxylic acid-containing resins with epoxy sites of compds. bearing ethylenically unsatd. groups and epoxy groups represented by EpCH2OR1O2CCR2:CH2 (Ep = epoxy, R1 = divalent linkage; R2 = H, Me), preferably, 4-hydroxybutyl acrylate glycidyl ether, and optionally (C) photopolymn. initiators and (D) colorants. Even when colorant concentration is high, the compns. have good developability, high adhesion strength to substrates or light-shielding layers, and good surface lubricity.
IT **119692-59-0DP**, 4-Hydroxybutyl acrylate glycidyl ether, ester with o-cresol novolak epoxy acrylate tetrahydrophthalate
581070-18-0P, Acrylic acid-α-methylstyrene-styrene copolymer ester with 4-hydroxybutyl acrylate glycidyl ether
581070-19-1P
(binder; high colorant concentration photopolymerizable compns. having good developability and solubility for color filters)
RN 119692-59-0 HCAPLUS
CN 2-Propenoic acid, 4-(2-oxiranylmethoxy)butyl ester (CA INDEX NAME)

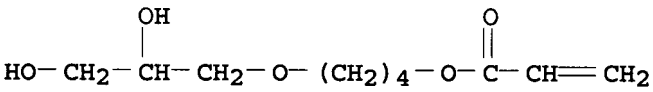


RN 581070-18-0 HCAPLUS
CN 2-Propenoic acid, polymer with ethenylbenzene and (1-

methylethenyl)benzene, 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 251298-12-1
CMF C10 H18 O5

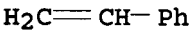


CM 2

CRN 52831-04-6
CMF (C9 H10 . C8 H8 . C3 H4 O2)x
CCI PMS

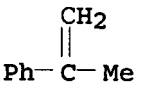
CM 3

CRN 100-42-5
CMF C8 H8



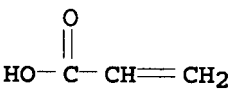
CM 4

CRN 98-83-9
CMF C9 H10



CM 5

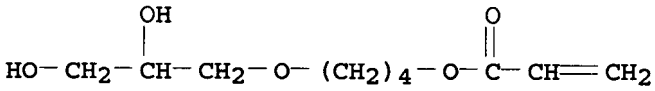
CRN 79-10-7
CMF C3 H4 O2



RN 581070-19-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and phenylmethyl 2-methyl-2-propenoate, 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 251298-12-1
CMF C10 H18 O5

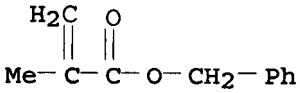


CM 2

CRN 191545-17-2
CMF (C11 H12 O2 . C6 H10 O3 . C5 H8 O2 . C4 H6 O2)x
CCI PMS

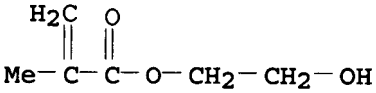
CM 3

CRN 2495-37-6
CMF C11 H12 O2



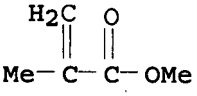
CM 4

CRN 868-77-9
CMF C6 H10 O3



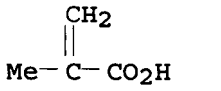
CM 5

CRN 80-62-6
CMF C5 H8 O2



CM 6

CRN 79-41-4
CMF C4 H6 O2



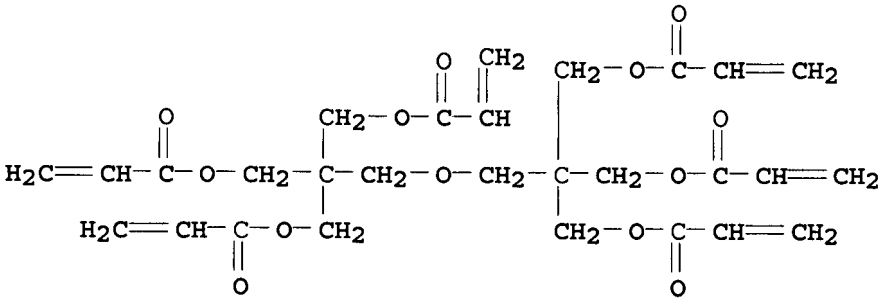
IT **581070-20-4P**, Acrylic acid-α-methylstyrene-styrene copolymer ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with dipentaerythritol hexaacrylate **581070-21-5P**, Benzyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate copolymer ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with dipentaerythritol hexaacrylate
(crosslinked; high colorant concentration photopolymerizable compns. having good developability and solubility for color filters)

RN 581070-20-4 HCAPLUS

CN 2-Propenoic acid, polymer with ethenylbenzene and (1-methylethenyl)benzene, 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester, polymer with 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 29570-58-9
CMF C28 H34 O13

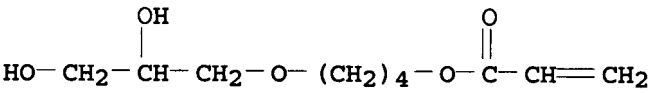


CM 2

CRN 581070-18-0
CMF C10 H18 O5 . x (C9 H10 . C8 H8 . C3 H4 O2)x

CM 3

CRN 251298-12-1
CMF C10 H18 O5

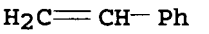


CM 4

CRN 52831-04-6
CMF (C9 H10 . C8 H8 . C3 H4 O2)x
CCI PMS

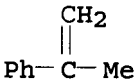
CM 5

CRN 100-42-5
CMF C8 H8



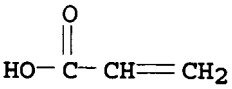
CM 6

CRN 98-83-9
CMF C9 H10



CM 7

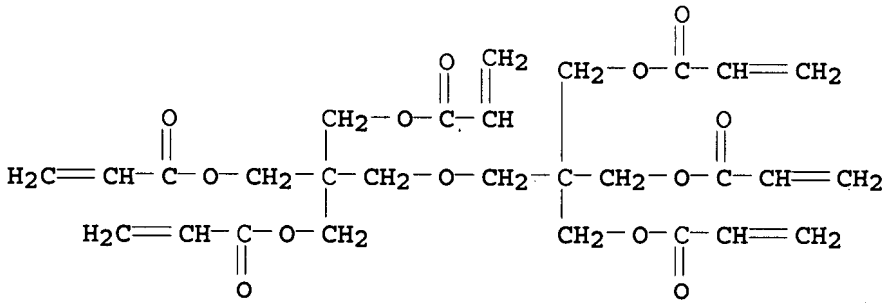
CRN 79-10-7
CMF C3 H4 O2



RN 581070-21-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and phenylmethyl 2-methyl-2-propenoate, 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester, polymer with 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 29570-58-9
CMF C28 H34 O13

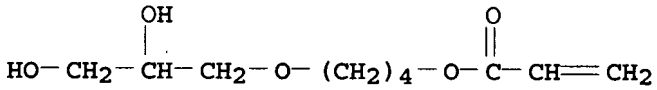


CM 2

CRN 581070-19-1
CMF (C11 H12 O2 . C6 H10 O3 . C5 H8 O2 . C4 H6 O2)x . x C10 H18 O5

CM 3

CRN 251298-12-1
CMF C10 H18 O5

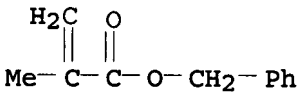


CM 4

CRN 191545-17-2
CMF (C11 H12 O2 . C6 H10 O3 . C5 H8 O2 . C4 H6 O2)x
CCI PMS

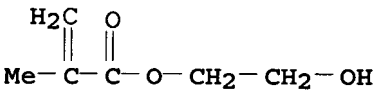
CM 5

CRN 2495-37-6
CMF C11 H12 O2



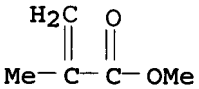
CM 6

CRN 868-77-9
CMF C6 H10 O3



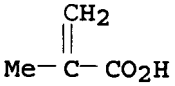
CM 7

CRN 80-62-6
CMF C5 H8 O2



CM 8

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-027
ICS C08F290-12; G02B005-20; G03F007-004
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 85-43-8DP, Tetrahydrophthalic anhydride, ester with o-cresol novolak epoxy acrylate, reaction products with 4-hydroxybutyl acrylate glycidyl ether 95-48-7DP, o-Cresol, novolak epoxy acrylate tetrahydrophthalate, ester with 4-hydroxybutyl acrylate glycidyl ether **119692-59-0DP**, 4-Hydroxybutyl acrylate glycidyl ether, ester with o-cresol novolak epoxy acrylate tetrahydrophthalate **581070-18-0P**, Acrylic acid-α-methylstyrene-styrene copolymer ester with 4-hydroxybutyl acrylate glycidyl ether **581070-19-1P**
(binder; high colorant concentration photopolymerizable compns. having good developability and solubility for color filters)
IT **581070-20-4P**, Acrylic acid-α-methylstyrene-styrene copolymer ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with dipentaerythritol hexaacrylate **581070-21-5P**, Benzyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate copolymer ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with dipentaerythritol hexaacrylate
(crosslinked; high colorant concentration photopolymerizable compns. having good developability and solubility for color filters)
IT 90-93-7, 4,4'-Bis(diethylamino)benzophenone
(**photosensitizer**; high colorant concentration photopolymerizable compns. having good developability and solubility for color filters)

L19 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:653443 HCAPLUS
DOCUMENT NUMBER: 139:188347
TITLE: **Photosensitive** lithographic printing plate material, its manufacture, and aqueous coating solution for the manufacture
INVENTOR(S): Kuroki, Takaaki; Hirabayashi, Kazuhiko

PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003233170	A	20030822	JP 2002-33872	20020212
PRIORITY APPLN. INFO.:			JP 2002-33872	20020212

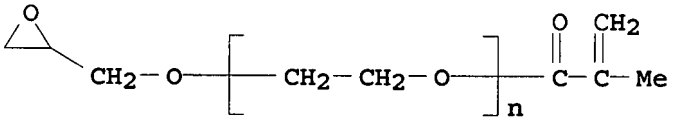
ED Entered STN: 22 Aug 2003

AB The printing plate material has an intermediate layer between a substrate and a photopolymerizable layer containing ethylenically addition-polymerizable compds. and radical generators sensitive to actinic energy beam. In manufacturing the printing plate, the intermediate layer is formed by coating process, where the layer is heated at the maximum plate surface temperature 105-250°. Preferably, the substrate is electrochem. surface-roughened with an acidic medium and then treated with an aqueous solution containing polyvinylphosphonic acid before formation of the intermediate layer. Also claimed is an aqueous coating solution containing ethylenically addition-polymerizable compds., ring-opening polymerizable compds., amino group-containing compds., or alkoxy group-containing compds. for formation of the intermediate layer. The obtained printing plate material has high interlayer adhesion, printability, and background soiling resistance.

IT **120516-17-8**
(intermediate layer component; heat treatment of intermediate layer in manufacture of **photosensitive** lithog. printing plate material for high interlayer adhesion)

RN 120516-17-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-(2-methyl-1-oxo-2-propenyl)-ω-(oxiranylmethoxy)- (9CI) (CA INDEX NAME)



IC ICM G03F007-00
ICS B41N001-14; B41N003-03; B41N003-04; C25D011-16; G03F007-11; G03F007-38

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **photosensitive** lithog printing plate manuf heat treatment; aq coating soln intermediate layer formation lithog printing; interlayer adhesion printability soiling resistance lithog printing plate

IT Surface treatment
(electrolytic surface roughening; heat treatment of intermediate layer in manufacture of **photosensitive** lithog. printing plate material for high interlayer adhesion)

IT Heat treatment
Lithographic plates
Photoimaging materials
(heat treatment of intermediate layer in manufacture of

photosensitive lithog. printing plate material for high interlayer adhesion)

IT Coating materials
(water-thinned, solution for; heat treatment of intermediate layer in manufacture of **photosensitive** lithog. printing plate material for high interlayer adhesion)

IT 102772-82-7, Acrylonitrile-ethyl methacrylate-methacrylic acid-methyl methacrylate copolymer
(binder of photopolymerizable layer; heat treatment of intermediate layer in manufacture of **photosensitive** lithog. printing plate material for high interlayer adhesion)

IT 78-10-4, KBE 04 107-95-9, 3-Aminopropionic acid 2530-85-0, TSL 8370 2867-47-2 5039-78-1 7659-36-1 18165-31-6, Ethoxysilane 35705-94-3, Phosmer PE 55750-22-6 114040-41-4 **120516-17-8** 581094-56-6, EX 5000H
(intermediate layer component; heat treatment of intermediate layer in manufacture of **photosensitive** lithog. printing plate material for high interlayer adhesion)

IT 40220-08-4, Aronix M 315
(photopolymerizable layer component; heat treatment of intermediate layer in manufacture of **photosensitive** lithog. printing plate material for high interlayer adhesion)

IT 27754-99-0, Polyvinylphosphonic acid
(substrate-treating agent; heat treatment of intermediate layer in manufacture of **photosensitive** lithog. printing plate material for high interlayer adhesion)

IT 37321-70-3, A1050
(substrate; heat treatment of intermediate layer in manufacture of **photosensitive** lithog. printing plate material for high interlayer adhesion)

L19 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:653439 HCAPLUS
DOCUMENT NUMBER: 139:205049
TITLE: **Photosensitive** lithographic printing plate material and its manufacture
INVENTOR(S): Kuroki, Takaaki; Hirabayashi, Kazuhiko
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003233166	A	20030822	JP 2002-30825	20020207
PRIORITY APPLN. INFO.:			JP 2002-30825	20020207

ED Entered STN: 22 Aug 2003

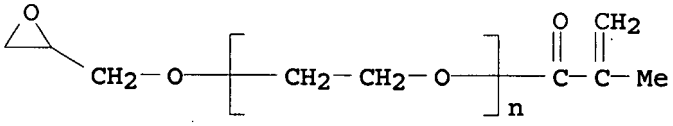
AB The printing plate material has a layer containing (a) a compound having ring-opening polymerizable groups and a compound having ethylenically addition-polymerizable groups or (b) a compound having ring-opening polymerizable groups and ethylenically addition-polymerizable groups on a metal substrate which is surface-roughened and treated with an aqueous solvent containing polyvinylphosphonic acid. The layer may be an intermediate layer formed between the substrate and a photopolymerizable layer. In manufacturing the printing plate material, the intermediate layer is formed by applying a coating solution containing a

compound having ≥2 ring-opening polymerizable groups and a compound having acid-releasing groups and ethylenically addition-polymerizable groups on the surface-treated metal substrate. Preferably, the substrate is electrochem. surface-roughened with an acidic medium and then treated with an aqueous solution containing polyvinylphosphonic acid before formation of the intermediate layer. The obtained printing plate material has high interlayer adhesion, printability, and background soiling resistance.

IT **120516-17-8**
(manufacture of **photosensitive** lithog. printing plate material having layer containing polymerizable compound for high interlayer adhesion)

RN 120516-17-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-(2-methyl-1-oxo-2-propenyl)-ω-(oxiranylmethoxy)- (9CI) (CA INDEX NAME)



IC ICM G03F007-00
ICS B41N001-08; G03F007-028; G03F007-09; G03F007-11

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **photosensitive** lithog printing plate manuf polymerizable compd; interlayer adhesion printability soiling resistance lithog printing plate

IT Surface treatment
(electrolytic surface roughening; manufacture of **photosensitive** lithog. printing plate material having layer containing polymerizable compound for high interlayer adhesion)

IT Lithographic plates
Photoimaging materials
(manufacture of **photosensitive** lithog. printing plate material having layer containing polymerizable compound for high interlayer adhesion)

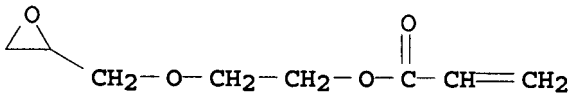
IT 581094-56-6, EX 5000H
(manufacture of **photosensitive** lithog. printing plate material having layer containing polymerizable compound for high interlayer adhesion)

IT 79-10-7, 2-Propenoic acid, uses 79-41-4, uses 4206-61-5
17557-20-9 17626-93-6 24615-84-7 26403-72-5 27252-81-9
55750-22-6 114040-41-4 **120516-17-8** 131303-16-7
581785-72-0 581785-73-1 581785-74-2
(manufacture of **photosensitive** lithog. printing plate material having layer containing polymerizable compound for high interlayer adhesion)

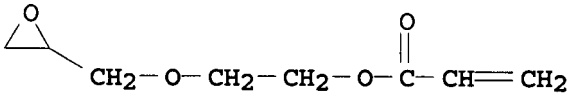
IT 27754-99-0, Polyvinylphosphonic acid
(substrate-treating agent; manufacture of **photosensitive** lithog. printing plate material having layer containing polymerizable compound for high interlayer adhesion)

IT 37321-70-3, A1050
(substrate; manufacture of **photosensitive** lithog. printing plate material having layer containing polymerizable compound for high interlayer adhesion)

L19 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:88030 HCAPLUS
DOCUMENT NUMBER: 136:326187
TITLE: Application of photopolymer to core-hair type microgels with various hair length
AUTHOR(S): Takahashi, Takanori; Watanabe, Hiroomi; Miyagawa, Nobukazu; Takahara, Shigeru; Yamaoka, Tsuguo
CORPORATE SOURCE: Department of Information and Image Science, Faculty of Engineering, Chiba University, Chiba-city, 263-8522, Japan
SOURCE: Polymers for Advanced Technologies (2002), 13(1), 33-39
CODEN: PADTE5; ISSN: 1042-7147
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 01 Feb 2002
AB The new microgels, called "core-hair" type microgels, were synthesized. They have a hair moiety consisting of the oxyhexano-1,7-diyl (-O-(CH2)5-C(O)-) group as a spacer and the acryloyl group for polymerization The hair length depends on the number of spacer units, and affects the viscosity and the thixotropy index of the microgel. These core-hair microgels show the pseudoplastic flow of a non-Newtonian fluid with moderate to high dispersibility in water or alc. solvents. Due to their viscosities and dispersibilities, these core-hair microgels are useful for photopolymer, e.g. for screen printing. Therefore, these microgels were actually applied to screen printing and confirmed pattern forming on a screen printing plate through water development. We now discuss the relation between the viscosity, the dispersibility, the **photosensitivity**, and the rate of photopolymn. to the hair length of the microgel.
IT **30491-78-2P**
(application of photopolymer to core-hair type microgels with various hair length)
RN 30491-78-2 HCAPLUS
CN 2-Propenoic acid, 2-(2-oxiranylmethoxy)ethyl ester (CA INDEX NAME)



IT **30491-78-2DP**, reaction product with a copolymer of styrene, divnylbenzene, and ar-ethenyl-N,N-dimethylbenzenemethanamine
(photo-crosslinked; application of photopolymer to core-hair type microgels with various hair length)
RN 30491-78-2 HCAPLUS
CN 2-Propenoic acid, 2-(2-oxiranylmethoxy)ethyl ester (CA INDEX NAME)



CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 35, 74
IT **30491-78-2P** 412915-42-5P 412915-44-7P 412915-45-8P
(application of photopolymer to core-hair type microgels with

various hair length)
IT **30491-78-2DP**, reaction product with a copolymer of styrene, divnylbenzene, and ar-ethenyl-N,N-dimethylbenzenemethanamine
412915-42-5DP, reaction product with a copolymer of styrene, divnylbenzene, and ar-ethenyl-N,N-dimethylbenzenemethanamine
412915-44-7DP, reaction product with a copolymer of styrene, divnylbenzene, and ar-ethenyl-N,N-dimethylbenzenemethanamine
412915-45-8DP, reaction product with a copolymer of styrene, divnylbenzene, and ar-ethenyl-N,N-dimethylbenzenemethanamine
(photo-crosslinked; application of photopolymer to core-hair type microgels with various hair length)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

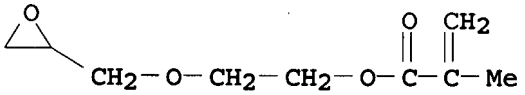
L19 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:317204 HCAPLUS
DOCUMENT NUMBER: 132:341249
TITLE: Heat development **photosensitive** material
INVENTOR(S): Muramatsu, Yasuhiko
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 40 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000137307	A	20000516	JP 1998-310250	19981030
PRIORITY APPLN. INFO.:			JP 1998-310250	19981030

OTHER SOURCE(S): MARPAT 132:341249
ED Entered STN: 16 May 2000
AB The title **photosensitive** material contains an organic Ag salt, **photosensitive** Ag halide grains, and a reducing agent on a support and is formed by adding an epoxy compound and an acid anhydride. The material shows high film strength and storage stability and provides high contrast black-and-white images even after storage for a long time of period.
IT **268226-68-2**
(heat-developable photog. material containing organic silver salt, silver halide, reducing agent, epoxy compd, and acid anhydride)
RN 268226-68-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(oxiranylmethoxy)ethyl ester, polymer with ethyl 2-propenoate (9CI) (CA INDEX NAME)

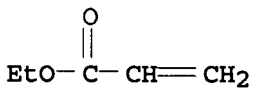
CM 1

CRN 30491-79-3
CMF C9 H14 O4



CM 2

CRN 140-88-5
CMF C5 H8 O2



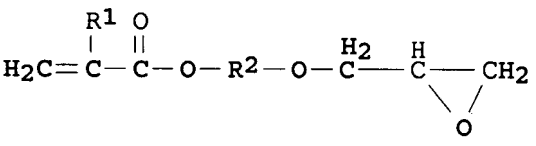
IC ICM G03C001-498
CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 85-42-7 85-44-9, 1,3-Isobenzofurandione 108-30-5, uses 108-31-6, 2,5-Furandione, uses 716-39-2, Naphtho[2,3-c]furan-1,3-dione 1732-96-3 2224-15-9 3101-60-8 3126-63-4 3543-39-3 3568-29-4 4037-32-5 4206-61-5 5763-49-5 13236-02-7 19438-59-6 19438-61-0 26141-88-8 27550-59-0 27878-56-4 54140-67-9 86630-59-3 92243-48-6 98081-22-2 103296-84-0 138652-14-9 233607-84-6 268226-67-1 **268226-68-2**
(heat-developable photog. material containing organic silver salt, silver halide, reducing agent, epoxy compd, and acid anhydride)

L19 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:752372 HCAPLUS
DOCUMENT NUMBER: 132:17142
TITLE: **Photoresist** composition and its cured product
INVENTOR(S): Yokojima, Minoru; Okubo, Tetsuo; Sasahara, Kazunori
PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11327139	A	19991126	JP 1998-134122	19980518

PRIORITY APPLN. INFO.: JP 1998-134122 19980518

ED Entered STN: 26 Nov 1999
GI



I

AB The title resin composition contains (a) a compound formed by addition of a compound I [R1 = H or Me; R2 = C2-4 alkylene, cyclohexane-1,4-dimethylene, (CH2CHR3OCH2CHR3)n (R3 = H, Me, Et; n = 1-5)] to the CO2H groups of a polymer having ≥1 CO2H group and (b) a diluting agent.

A cured product of the composition is also claimed. The composition useful as a permanent resist shows improved developability and provides a high resolution cured solder resist pattern showing high thermal and plating resistance.

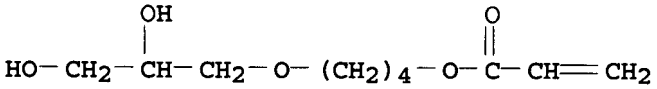
IT **251298-13-2P**, Methacrylic acid-methyl methacrylate copolymer ester with 4-glycidyloxybutyl acrylate
(**photoresist** composition containing carboxyl polymer ester with glycidyl ether acrylate)

RN 251298-13-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate, 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 251298-12-1
CMF C10 H18 O5

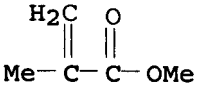


CM 2

CRN 25086-15-1
CMF (C5 H8 O2 . C4 H6 O2)x
CCI PMS

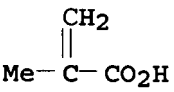
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-038
ICS G03F007-038; C08F290-12; C09D004-06; C09D201-02

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST **photoresist** glycidyl ether acrylate polymer ester; carboxyl polymer glycidyl ester **photoresist**

IT **Photoresists**
(**photoresist** composition containing carboxyl polymer ester with glycidyl ether acrylate)

IT **251298-13-2P**, Methacrylic acid-methyl methacrylate copolymer ester with 4-glycidyloxybutyl acrylate
(**photoresist** composition containing carboxyl polymer ester with glycidyl ether acrylate)

IT 1320-67-8, Propylene glycol monomethyl ether 77641-99-7, KAYARAD DPHA 85305-70-0, EOCN 104S
(**photoresist** composition containing carboxyl polymer ester with glycidyl ether acrylate)

L19 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:217664 HCAPLUS
DOCUMENT NUMBER: 128:302056
TITLE: Heat development **photosensitive** material having layer containing epoxy compound and isocyanate crosslinker
INVENTOR(S): Hatakeyama, Akira
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10090826	A	19980410	JP 1996-266811	19960917
PRIORITY APPLN. INFO.:			JP 1996-266811	19960917

ED Entered STN: 17 Apr 1998

AB Title material having a **photosensitive** layer containing **photosensitive** Ag halides on ≥1 side of a support and containing a non-**photosensitive** Ag salt and a reducing agent for the salt, contains an epoxy compound having ≥1 epoxy group in its mol. and an isocyanate crosslinking agent in ≥1 layer on the **photosensitive** side and optionally phthalazine. The material shows high sensitivity and low fog.

IT **205655-02-3P**
(heat development silver halide photog. material having antifoggant layer containing epoxy compound and isocyanate crosslinker)

RN 205655-02-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(oxiranylmethoxy)ethyl ester, polymer with ethyl 2-propenoate and Sumidur N 3500 (9CI) (CA INDEX NAME)

CM 1

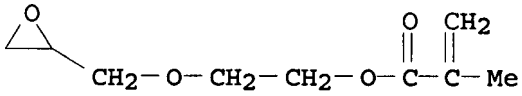
CRN 127464-53-3
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

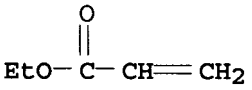
CRN 30491-79-3

CMF C9 H14 O4



CM 3

CRN 140-88-5
CMF C5 H8 O2



IC ICM G03C001-498
ICS G03C001-498
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 205654-88-2P 205654-90-6P 205654-91-7P 205654-92-8P
205654-93-9P 205654-94-0P 205654-95-1P 205654-96-2P
205654-97-3P 205654-98-4P 205654-99-5P 205655-00-1P
205655-01-2P **205655-02-3P**
(heat development silver halide photog. material having antifoggant layer containing epoxy compound and isocyanate crosslinker)

L19 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:712178 HCAPLUS
DOCUMENT NUMBER: 121:312178
TITLE: Black photopolymerizable composition, hardened film therefrom, and manufacture of color filter for LCDs
INVENTOR(S): Ichinose, Naoko; Kato, Yoshinori; Kano, Hirokazu; Futamura, Nobuyuki
PATENT ASSIGNEE(S): Nippon Kayaku Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06067421	A	19940311	JP 1992-241473	19920819
PRIORITY APPLN. INFO.:			JP 1992-241473	19920819

ED Entered STN: 24 Dec 1994
AB The title composition comprises a photopolymerizable compound cong. ≥1 ethylenic unsatd. double bond, a photopolymn. initiator, optionally a **photosensitive** resin, and carbon black grafted with a polymer compound The polymer compound may be a compound containing aziridine, oxazoline, N-hydroxyalkylamide, epoxy, isocyanate, vinyl, acrylic group, methacrylic group, a Si-containing hydrolyzable group, and/or

amino, or may be acrylic acid-styrene copolymer and polyoxyethylene as an essential component.

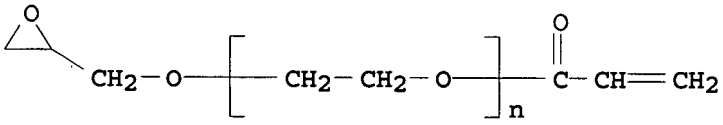
IT **158944-79-7D**, grafted with carbon black
(photopolymerizable composition and manufacture of color filter for LCD)

RN 158944-79-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylmethylbenzene and α-(1-oxo-2-propenyl)-ω-(oxiranylmethoxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 120516-19-0
CMF (C2 H4 O)n C6 H8 O3
CCI PMS



CM 2

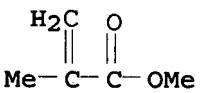
CRN 25013-15-4
CMF C9 H10
CCI IDS

D1—Me

D1—CH═CH$_2$

CM 3

CRN 80-62-6
CMF C5 H8 O2



IC ICM G03F007-027
ICS G02B005-20; G03C001-675; G03F007-004; G03F007-028

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT 100-42-5D, polymer with maleic acid, phenol novolak epoxy acrylate, and dipentaerythritol hexaacrylate 110-16-7D, 2-Butenedioic acid (Z)-, polymer with styrene, dipentaerythritol hexaacrylate, phenol novolak epoxy acrylate 29570-58-9D, Dipentaerythritol hexaacrylate, polymer with styrene, maleic acid, and phenol novolak epoxy acrylate 123960-57-6D, Acrylamide-N-hydroxyethyl methacrylamide-N-vinylpyrrolidone copolymer, grafted with carbon black 158944-77-5D, grafted with carbon black 158944-78-6D, grafted with carbon black **158944-79-7D**, grafted with carbon black 159339-41-0
(photopolymerizable composition and manufacture of color filter for LCD)

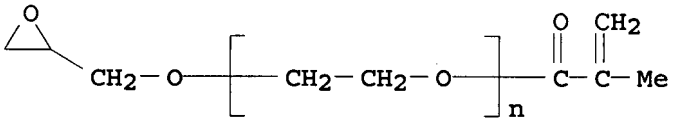
L19 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:202925 HCAPLUS
DOCUMENT NUMBER: 110:202925
TITLE: **Photosensitive** resin compositions for relief plates
INVENTOR(S): Kawaguchi, Chitoshi; Kawanami, Toshitaka
PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63177130	A	19880721	JP 1987-8816	19870117
JP 08010331	B	19960131		
PRIORITY APPLN. INFO.:			JP 1987-8816	19870117

ED Entered STN: 26 May 1989
AB The title compns., providing desirable hardness and rubbery resilience, contain partially saponified poly(vinyl alc.) (degree of saponification 70-99 mol %, d.p. 200-2000), monomer XCH2CH(OH)CH2Y [X = (OCHR1CH2)n(OR2)mO2CCR3:CH2; Y = OH, O2CCR4:CH2, O2C(CH2)pOH, OR5; R1, R3, R4 = H, Me; R2 = OH group-containing C1-5 alkylene; R5 = OH group-containing C1-5 alkyl; n = 4-23; m = 0, 1; p = 1-5] containing ≥2 OH groups, and photoinitiator. A typical composition, providing relief plate with Shore A hardness 880° and resilience (JIS K 6301) 15% and high resolution, comprised partially saponified poly(vinyl acetate) (d.p. 500, degree of saponification 80.1 mol %) 100, water 80, p-methoxyglycol 10, and Epolite 400E methacryloylate 80 parts.
IT **120516-18-9 120516-20-3**
(photocurable, containing partially saponified poly(vinyl acetate), for relief plates with good hardness and resolution)
RN 120516-18-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(2-methyl-1-oxo-2-propenyl)-ω-(oxiranylmethoxy)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

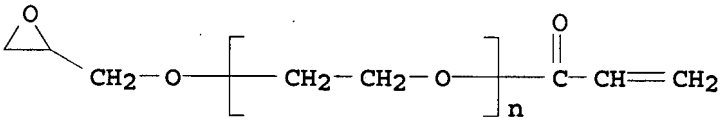
CRN 120516-17-8
CMF (C2 H4 O)n C7 H10 O3
CCI PMS



RN 120516-20-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(1-oxo-2-propenyl)-ω-(oxiranylmethoxy)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 120516-19-0
CMF (C2 H4 O)n C6 H8 O3
CCI PMS



IC ICM G03C001-68
ICS C08F002-48; C08F020-28; G03C001-68; G03F007-02
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST epoxy methacrylate **photosensitive** printing plate; hardness epoxy methacrylate printing plate; resilience epoxy methacrylate printing plate; polyvinyl alc printing plate
IT 79134-44-4, Epolite 400E methacrylate 87719-53-7, Epolite 400E acrylate **120516-18-9 120516-20-3**
(photocurable, containing partially saponified poly(vinyl acetate), for relief plates with good hardness and resolution)

L19 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:85462 HCAPLUS
DOCUMENT NUMBER: 110:85462
TITLE: Electrophotographic plates with polymer binders
INVENTOR(S): Taguchi, Takao; Kawakami, Hisami
PATENT ASSIGNEE(S): Toppan Printing Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63199359	A	19880817	JP 1987-32878	19870216
JP 05049218	B	19930723		

PRIORITY APPLN. INFO.: JP 1987-32878 19870216

ED Entered STN: 04 Mar 1989
AB Binders for **photosensitive** layers of electrophotog. plates containing **photosensitive** pigments are copolymers with monomer units including methacrylic esters, acrylic esters, carboxylic acids, and epoxy-containing (meth)acrylic esters. These binders are heat-curable

and provide high mech. strength and good electrophotog. performance. Thus, 40 g 50:5:5:50 Et methacrylate-glycidoxypropyl methacrylate-itaconic acid-Me acrylate copolymer, 80 g ZnO sensitized with tetraiodofluorescein, and solvents were dispersed and the mixture was coated on subbed conductive paper and dried to obtain an electrophotog. plate. The plate was chargeable to 480 V and showed high sensitivity and low residual voltage. High resistance to pressure application and abrasion was also shown.

IT **118777-90-5**
(binder, heat-curable, for electrophotog. plates)

RN 118777-90-5 HCAPLUS

CN Butanedioic acid, methylene-, polymer with ethyl 2-methyl-2-propenoate, methyl 2-propenoate and 3-(oxiranylmethoxy)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

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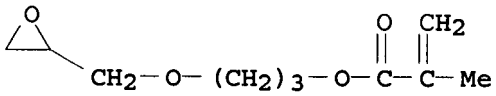
CRN 118777-89-2
CMF C10 H16 O4



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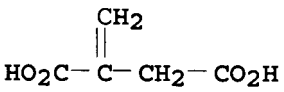
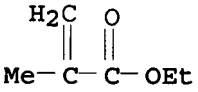
CRN 97-65-4
CMF C5 H6 O4



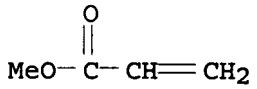
CM 3

CRN 97-63-2
CMF C6 H10 O2



CM 4

CRN 96-33-3
CMF C4 H6 O2



IC ICM G03G005-05
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT **118777-90-5**
(binder, heat-curable, for electrophotog. plates)

L19 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:31450 HCAPLUS
DOCUMENT NUMBER: 110:31450
TITLE: Water-developable **photosensitive** resin composition, and resin or printing plate therefrom
INVENTOR(S): Kimoto, Koichi; Umeda, Yasushi; Kawaguchi, Chitoshi; Kawanami, Toshitaka
PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 276092	A2	19880727	EP 1988-300308	19880115
EP 276092	A3	19890726		
EP 276092	B1	19930407		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
JP 63177127	A	19880721	JP 1987-8810	19870117
JP 08010328	B	19960131		
JP 63177128	A	19880721	JP 1987-8811	19870117
JP 08010329	B	19960131		
JP 63177129	A	19880721	JP 1987-8812	19870117
JP 63177125	A	19880721	JP 1987-8813	19870117
JP 08010330	B	19960131		
CA 1332212	C	19941004	CA 1988-556495	19880114
AU 8810311	A	19880721	AU 1988-10311	19880115
AU 600546	B2	19900816		
AT 88025	T	19930415	AT 1988-300308	19880115
US 5100763	A	19920331	US 1990-494917	19900312

PRIORITY APPLN. INFO.:		
JP 1987-8810	A	19870117
JP 1987-8811	A	19870117
JP 1987-8812	A	19870117
JP 1987-8813	A	19870117
EP 1988-300308	A	19880115
US 1988-144820	B1	19880115

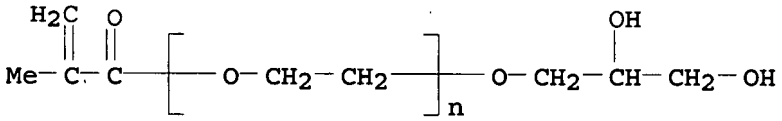
ED Entered STN: 21 Jan 1989
AB A H2O-developable **photosensitive** resin composition capable of

hot-melt molding at 60-130° comprises: (1) H2O-sol/dispersible poly(vinyl alc.) prepared by saponifying (50-70 mol %) a copolymer of (a) a vinyl ester and (b) a monomer; (2) a polymerizable monomer; and (3) a photopolymn. initiator. The composition is useful for preparing relief printing plates without requiring a drying step, hence eliminating the possibility of environmental pollution. Thus, a Me acrylate-vinyl acetate copolymer was prepared, saponified and used in a photopolymerizable composition

IT **118181-76-3P 118181-77-4P**
(preparation and use of, in hot-melt-moldable photoimaging composition)

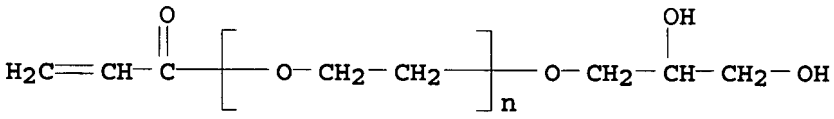
RN 118181-76-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-(2-methyl-1-oxo-2-propenyl)-ω-(2,3-dihydroxypropoxy)- (9CI) (CA INDEX NAME)



RN 118181-77-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-(1-oxo-2-propenyl)-ω-(2,3-dihydroxypropoxy)- (9CI) (CA INDEX NAME)



IC ICM G03F007-10
ICS G03C001-68

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 87719-53-7P **118181-76-3P 118181-77-4P**
118212-44-5P 118212-45-6P
(preparation and use of, in hot-melt-moldable photoimaging composition)

L19 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:31449 HCAPLUS

DOCUMENT NUMBER: 110:31449

TITLE: Water-developable photosentitive resin composition, and resin or printing plate therefrom

INVENTOR(S): Kimoto, Koichi; Umeda, Yasushi; Kawaguchi, Chitoshi; Kawanami, Toshitaka

PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 276093	A2	19880727	EP 1988-300311	19880115
EP 276093	A3	19890719		
EP 276093	B1	19920729		

R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE					
CA 1328048	C	19940329	CA 1988-556496		19880114
AU 8810310	A	19880721	AU 1988-10310		19880115
AU 601917	B2	19900920			
US 4935333	A	19900619	US 1988-144808		19880115
AT 78939	T	19920815	AT 1988-300311		19880115
JP 63314537	A	19881222	JP 1988-7884		19880118
JP 2563955	B2	19961218			
JP 01026844	A	19890130	JP 1988-7883		19880118
JP 2540577	B2	19961002			
PRIORITY APPLN. INFO.:			JP 1987-8814	A	19870117
			JP 1987-8815	A	19870117
			EP 1988-300311	A	19880115

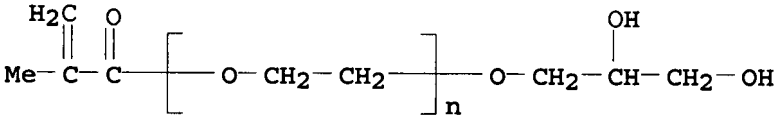
ED Entered STN: 21 Jan 1989

AB A H2O-developable **photosensitive** resin composition capable of hot-melt molding at 60-130° comprises: (1) H2O-soluble or H2O-dispersible poly(vinyl alc.) having terminal mercapto groups prepared by saponifying (50-70 mol%) a copolymer prepared from (a) a nonionic monomer (0-20 mol%), (b) an ionic monomer (0-10 mol%, the total content of a and b 0.1-20 mol %), and (c) a vinyl ester in presence of a thiolic acid; (2) a polymerizable monomer; and (3) a photopolymn. initiator. The composition is useful for preparing relief printing plates which does not require a drying step, hence eliminating the possibility of environmental pollution. Thus, a vinyl acetate-Me acrylate-sodium 2-acrylamide-2-methylpropanesulfonate-thiolacetic acid telomer was hydrolyzed and used in a **photosensitive** resin plate composition

IT **118181-76-3P 118181-77-4P**
(preparation and use of, in photopolymerizable composition)

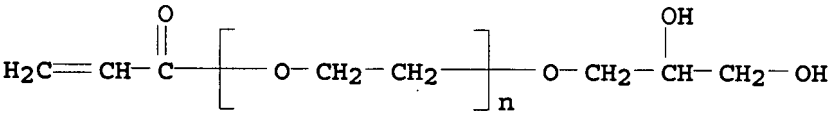
RN 118181-76-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-(2-methyl-1-oxo-2-propenyl)-ω-(2,3-dihydroxypropoxy)- (9CI) (CA INDEX NAME)



RN 118181-77-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-(1-oxo-2-propenyl)-ω-(2,3-dihydroxypropoxy)- (9CI) (CA INDEX NAME)



IC ICM G03F007-10
ICS G03C001-68

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Printing plates
(relief, hot-melt-moldable **photosensitive** compns. containing

thiol telomers for)
IT 25736-86-1P 87719-53-7P **118181-76-3P 118181-77-4P**
118212-44-5P 118212-45-6P
(preparation and use of, in photopolymerizable composition)

L19 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1978:599214 HCAPLUS
DOCUMENT NUMBER: 89:199214
TITLE: Ultraviolet curable aqueous coatings
INVENTOR(S): McCarty, William H.
PATENT ASSIGNEE(S): Mobil Oil Corp., USA
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4100047	A	19780711	US 1976-731144	19761012
PRIORITY APPLN. INFO.:			US 1976-731144 A	19761012

ED Entered STN: 12 May 1984
AB UV-curable aqueous coating solns. contained a hydroxy functional ethylenically unsatd. material, an amino photoinitiator and a tetracarboxylic dianhydride, including benzophenone tetracarboxylic dianhydride, which is incorporated into the polymer and acts as a **photosensitizer.** Thus, polyethylene glycol hydroxyethyl acrylate ether 406, benzoquinone 0.023, benzophenone tetracarboxylic dianhydride 25, and pyromellitic dianhydride 92 g was heated 5 h at 70-5° and 61.6 g dimethylethanolamine and 250 g water added to give a coating with 70% solids content and Gardner-Holdt viscosity E-F. The coating was applied to a metal substrate and cured by passing under 2 200 W/in. medium pressure Hg lamps at 10 ft/min. in air. The cured coating was dry, nontacky and water-insol.
IT **68343-04-4**
(coatings, UV-curable)
RN 68343-04-4 HCAPLUS
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 5,5'-carbonylbis[1,3-isobenzofurandione] and α-[2-[(1-oxo-2-propenyl)oxy]ethyl]-ω-hydroxypoly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 60857-97-8
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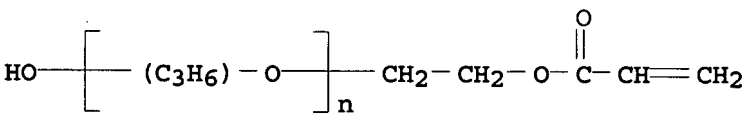
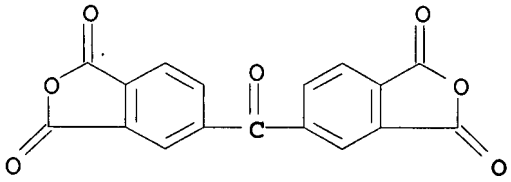
CCI IDS, PMS



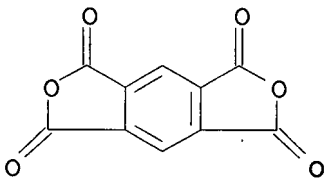
CM 2

CRN 2421-28-5
CMF C17 H6 O7



CM 3

CRN 89-32-7
CMF C10 H2 O6



IC C08F002-50
INCL 204159230
CC 42-7 (Coatings, Inks, and Related Products)
IT **68343-04-4**
(coatings, UV-curable)

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               SEL RN

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                 119692-59-0/BI OR 619-66-9/BI OR 709043-20-9/BI OR
                 9002-89-5/BI)
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L6             STR
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L8           320 SEA SUB=L2 SSS FUL L6
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L11          217 SEA ABB=ON  PLU=ON  L10 NOT 1-100/P
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L21            9 SEA ABB=ON  PLU=ON  L14/DP  OR L14/D
L22            0 SEA ABB=ON  PLU=ON  L21 NOT L18
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